

CRITICAL APPRAISAL OF URBANIZATION IN PURULIA MUNICIPALITY

Meelan Chamling*

Abstract

Urbanization and modernization are closely related and hence they are in the forefront of discussion and research of Geography. The shift of population from village to city and the process of transformation of a village into the city are called Urbanization. Today, urbanization is a worldwide phenomenon experienced by all countries of the world. In the same context, Purulia Municipality is also fast experiencing this most powerful socio-economic component of modernity. Purulia, one of the most backward districts of West Bengal, has almost ousted from the main platform of economic development and urbanization process. But the growth and spread of globalization and related phenomena are gradually and steadily embracing the district which can be understood by the ever increasing industrial activities and modernization in Purulia Municipality. Moreover, this process has also given birth to a number of shortcomings and its impact is clearly visible among the socio-economic and cultural aspects of the people and its resultant urban morphology.

Key words: Municipality, urbanization, urban morphology, globalization, industrialization, slums, rural-urban fringe

Introduction

The term urbanization in the context of a transformation from ruralism to urbanism concerned with a threefold change: a) behavioral b) economic and c) demographic. All these affect the spatial organization of the human settlement and thereby the design of the urban area. Purulia district which was in fairly backward for a long period of time has started showing gradual response to these factors but not in a uniform manner. Though Purulia Municipality is at present the most urbanized center in the whole district none the less a critical analysis is required to review the reasons for its urbanization and its overall influence on the growing urban landscape and population.

Study area

Purulia district with the total area of 6259 sq km and a population of 2927965 (2011 census) is one of the western most and economically backward districts of West Bengal. It has 3 municipalities, 11 urban units and 9 census towns. Of all these, Purulia town (Municipality) with an area of 13.93 sq km is the largest and the oldest urban center established in 1876 during the British period. It has a subtropical climate characterized by low rainfall and high evaporation. Temperatures vary between 3.8° C in winter to 52° C in summer making it one of the hottest places in West Bengal. According to the 2011 census, the population of the town is about 121436 with the density of 6760 people per sq km. Under the Municipality there are 22 wards and the number of households is 21543.

Objectives

The main objectives of the study are to throw light on some of the important aspects of growing trend of urban set up in the study area:

- To define and find out the reasons for the urbanization.
- To study the various geographical attribute of the urbanization.
- Trend of urban growth and its relativity
- Trace the problems and menace faced due to the rapid expansion of the urban amenities.
- Construct the remedial measures to overcome the growing problems.

Methodology

To understand and study Purulia urban center, methodology adopted is being outlined below:

- Data as regard to various urban attribute have been collected from the Purulia Municipality Office.
- The District Statistical Handbook has been an important source for the secondary data.
- Cartograms and statistical diagrams are used to present the realistic pictures of the study.
- Finally internet browsing also forms an important part of the methodology.

Causes of Urbanization in Purulia

Urbanization is a dynamic socio-economic force spreading across the world and crossing all the boundaries of religions, customs, race, caste etc. Though the service catered by it may be of the same nature but the process and the causes behind it may not be the same everywhere. Each and every urban nodal point has developed owing to a different set of factors. The comprehensive analysis of the area suggests the following factors for its urbanization:

Economic factor

Perhaps among all the factors, it can be said that economic activity is perhaps the most pivotal driving force for the rise of urbanization in Purulia. Due to the process of industrialization along with the innovation of globalization, large number of industries pertaining to both medium and small scale has come up in the area. Apart from these, commercial shops, small and medium traders, wholesalers, banking and insurance sectors, postal services etc. have shown rapid expansion. Purulia Municipality being the CBD of the district provides all the urban facilities to the people. This indeed has greatly changed the urban morphology and landscape within a short period of time.

Tourism

Due to activism of Maoism and its detrimental impact, the main streams of tourism have almost come to the halt. But in the recent past due to good governance policy, there has been marked reduction in the red flag activities which in turn has boosted the tourism industry. Ayodha Hill, Joychandi Pahar, Sahed Bandh Lake, Surulia Zoo, Bagmundhi Pahar etc are the main attraction of the region. The legacy of Chhau dance and Jhumur song with its world wide recognition, pulls a large number of tourists both domestic and foreign every year. Hence, in the present scenario, tourism factor has paved the way for urbanization in Purulia.

Administrative Factors

Purulia is the headquarter of the district; it is the main hub for all the important official works. It houses all the important offices of civil servants, MPs, MLAs, administrative departments etc. As such, due to its tertiary facilities, every year huge people migrate from adjoining rural areas of the town.

Educational Development

Today Purulia municipality area has become the main centre of learning in the whole district. Many new schools, colleges and educational institutions offering good career oriented programmes have been established which in turn is attracting huge inflow of people in the town. Highly acknowledged institutions like Sainik School Purulia, Ram Krishna Mission, Ekalabya School for SC/ST etc. are located in the town. The demand for better education and career has been one of the emerging and determining factors for its increasing urbanization.

Educational Institutions in Purulia Municipality (2011)

SI No.	Particular	Statistics
1.	Primary School	78
2.	High School	15
3.	SSK	10
4.	NCEC	02
5.	CEC	22
6.	Colleges	05
7.	University	State University – 01, Open University - 01

Source: Field Survey

Transportation

Purulia is well connected by both roads and railways. Three railway routes provided by South Eastern railways connect Purulia with all the major cities of the country. In terms of road transport,

NH 32, NH 60A, NH 2 and State highway 5 fulfill all transportation and communication requirements of the place. All the important cities like Kolkata, Durgapur, Bokaro, Dhanbad, Asansol are easily accessible from Purulia. This in turn has played vital role in the urbanization of Purulia.

Medical facilities

Since Purulia has a large number of advanced and sophisticated medical institutions, it has become the center point for urbanization. In order to avail the medical facilities people from all the corner of the district visit Purulia town. The absence of adequate health service in the rural areas pushes the people to settle in and round the town.

Health Institutions in Purulia Town (2011)

Sl. No.	Name of the health unit	Facilities	Controlling Authority	No. of Beds
1.	Deben Mahato Dist. Hospital	General	Govt.	506
2.	Purulia Jail Hospital	General	Govt.	09
3.	Purulia Mental Hospital	Mental	Govt.	10
4.	Sanjeevini Nursing Home	Maternity	Pvt.	20
5.	Rameshwarlal Seva Pratisthan	General	Pvt.	20
6.	Rotary Service	X Ray	NGO	45
7.	Lifeline Nursing Home	Maternity	Pvt.	10
8.	Roy's Nursing Home	Maternity	Pvt.	15

Source: Field Survey

Trend and Pattern of Urban Population

The desire to live a comfortable life with all the urban facilities pulls a large number of people from the rural areas every year. With the passage of time, the share of urban population in Purulia is showing sharp increase which can be seen through the diagram given below. Further, by critically analyzing the past and present rate of birth and death variables, the future population of the Purulia urban center has been computed and projected in zone wise.

Growth of Urban population

YEAR	POPULATION
1971	57708
1981	73904
1991	92386
2001	113766
2011	121436

Source: Census of India

Future projected urban population of Purulia

Zone	Census Year 2001	Design Population		
		Base Year 2013	Intermediate Year 2028	Final Year 2043
I	24294	31596	41138	52576
II	28935	36450	46104	57530
III	24547	35573	48035	63445
IV	19449	24055	30405	37959
V	16574	21487	27876	35647
Total	113799	145827	193553	247156

Source: Census of India, Computed by Researcher

So, through this statistical diagram it is clearly visible that the increasing urban population will bring drastic change both in urban morphology and urban landscape over space and time.

Decadal growth rate of Purulia urban population

Arithmetic Increase Method

Sl. No.	Year	Population	Increase in Population
	(1)	(2)	(3)
1	1971	57708	16196
2	1981	73904	
3	1991	92386	18482
4	2001	113766	21380
	Total	337764	56058

Average per decade

$$X = 84441$$

$$x_1 = 18686$$

Therefore, average rate of increase per decade

$$x = 22.12 \%$$

(Source: Census of India, Computed by Researcher)

Ward wise Population		
Sl.No.	Ward No.	Population
1	1	6065
2	2	5009
3	3	5156
4	4	4740
5	5	8087
6	6	6256
7	7	7251
8	8	6096
9	9	8534
10	10	7683
11	11	5545
12	12	3535
13	13	1799
14	14	3616
15	15	2888
16	16	6558
17	17	4369
18	18	7215
19	19	3116
20	20	4987
21	21	5822
22	22	7109
Total		121436

Source: Computed by Researcher

Problems of Urbanization

In the discussion so far it is found that Purulia is rapidly passing through the urbanization phase. But under the process it is also simultaneously facing serious urban crisis and problems. Some of them are listed below:

Environmental Problem: With the unprecedented urbanization and related phenomenon, Purulia is facing large scale urban environmental deterioration over the year. The level of air, water and solid waste pollution are steadily rising. Day by day, precipitation is decreasing and surface temperature has greatly increased.

Climate change caused by urbanization

SI No.	Climatic Elements	Parameter	Urban compared with rural (- less; + more)
1.	Temperature	annual mean	+7 C
2.	Wind speed (short building)	annual mean	-20 to 30%
3.	Wind speed (tall building)	annual mean	+10 to 20%
4.	Cloudiness	cloud frequency fogs	+5 to 10% +100% in winter
5.	Precipitation	amounts days	+ 5 to 10% 10%

After John R short (modified)

Slums and Squatters

The biggest problem of urbanization in Purulia can be seen in the spread of slums and Squatters. As per IHSDP survey (2011) it has a slum population of about 47544 and BPL population is 8804. This uncontrolled population lives in the settlements that are made up of temporary buildings with few services. The studies reveal that these areas lack the basic amenities like safe drinking water, poor housing, sanitation and health services making the situation more problematic and complicated.

Present water production from River Kasai (only source of water supply for the town)

Sl. No.	Production Units	Capacity July – April 2010	Capacity April – July 2011
1.	Teldhi water intake	6356m ³ /day	681m ³ /day
2.	Teldihi 7 tubewells		5808m ³ /day
3.	Similia 3 tubewells	2616m ³ /day	2616m ³ /day
	Total	8972m ³ /day	9105m ³ /day

With a present total water production of about 9000 cubic m³/day for a population of about 125,000, the average gross water duty delivered in town is 72 lpcd. This is far less from the net design duty of 135 lpcd planned for the town in accordance with municipal authority which is causing severe water crisis.

Unemployment

Every year huge flow of rural urban migration is experienced by the town. The main motive behind such large scale migration is in search of good jobs and thus a better way of life. As in the town, there is already the shortage of employment; this migration has further aggravated the

problem. Within a short span of time the percentage of unemployment has increased many folds in Purulia.

SI No.	Occupational structure	Percentage
1.	Manufacturer	17
2.	Household industries	15
3.	Trade and Commerce	25
4.	Transportation Workers	5
5.	Office Workers	22
6.	Others	16

Source: Field Survey

Traffic Congestion

As Purulia town is growing in both spatial extension and urban functions; it is facing the growing momentum of traffic congestion. The main CBD of the town is severely affected by the lack of space to park the vehicles. Moreover, the concentration of govt. Offices, schools, colleges in the town has put tremendous pressure on public transportation and given rise to related problems.

Population explosion

The uncontrolled and explosive population swelling of Purulia Municipality is mainly a rural-urban migration in nature. To avail the multi-dimensional urban functional services, there has been steady flow of the people even from the remote corner of the district, because of which the increase in population has already reached the threshold with the density of 6760 person per sq km (2011)

Remedial Measures and Conclusion

The study of Purulia Municipality, its urban activities and urban morphology reveals interesting geographical attributes which require more introspection and in depth research. Some of the remedial measures to overcome the problem and suggestion to improve the urbanization in Purulia Municipality are highlighted below:

- (i) With the discussion of a wide spectrum of urbanization, Purulia Municipality has to be provided with additional funds to formulate future policies and execute the urban plans.
- (ii) The construction of over bridge and expansion of state highways to some extent can solve the problems of traffic congestion. Moreover, the Purulia Municipality in collaboration with district motor vehicle department and police department should chalk out effective and efficient traffic management.
- (iii) To check the spread of squatters and slums, Municipality needs to implement strict rules and regulation for the unplanned construction. It must provide slums with land

- titles and small loans to improve homes. The basic needs like safe drinking water, garbage disposal, and sanitation and health facilities must be fulfilled.
- (iv) In order to solve the unemployment problem, Purulia Municipality should ensure that all the urban renewal and employment programmes are implemented at the grass root level. Jawahar Rojgar Yojna , TRYSM, Swarna Jayanti Shahari RozgarYojna etc urban scheme can provide employment to large number of people. Credit facilities must be provided to small scale industries to generate more employment opportunities. In this regard, Purulia Municipality must ensure that the role of NABARD be activated. Moreover, opening of career oriented and vocational courses can solve this problem substantially in future.
- (v) District administration should establish more satellite towns in order to divert the migration of rural people to avoid unprecedented growth of urban population.

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